WO 2005/096845 PCT/NL2005/000269

Claims

1. A liquid complete nutritional composition suitable for feeding cachectic patients, having an energy density of at least 1.45 kcal/ml (at least 6.06 kJ/ml), comprising:

- a carbohydrate fraction in an amount of 17-27 g per 100 nml (0.68-1.08 kcal/ml);
- a protein fraction in an amount of 7.8-12 g per 100 ml (0.31-0.48 kcal/ml); and
- a lipid fraction;

characterised in that at least 70 wt.% of the protein fraction is obtained by demineralising milk, and the protein fraction comprises between 25 and 37 wt.% of whey proteins.

- 2. A liquid composition according to claim 1, in which said demineralising is achieved by ultrafiltration.
- 3. A liquid complete nutritional composition suitable for feecling cachectic patients, having an energy density of at least 1.45 kcal/ml (at least 6.06 kJ/ml), comprising:
 - a carbohydrate fraction in an amount of 17-27 g per 100 mal (0.68-1.0 kcal/ml);
 - a protein fraction; and
 - a lipid fraction;

characterized in that:

- the carbohydrate fraction comprises
 - = 0-35 wt.% of sucrose;
 - = 15-45 wt.% of other non-reducing mono-, di- and/or trisaccharides;
 - = 5-50 wt.% of other mono- and disaccharides;
 - = 5-40 wt.% of other trisaccharides and higher saccharides.
- 4. The composition according to claim 3, wherein the non-reducing disaccharides comprise trehalose.
- 5. A liquid complete nutritional composition suitable for fee-ding cachectic patients, having an energy density of at least 1.45 kcal/ml (at least 6.06 kJ/ml), comprising:
 - a carbohydrate fraction in an amount of 17-27 g per 100 nml (0.68-1.08 kcal/ml);
 - a protein fraction in an amount of 7.8-12 g per 100 ml (0.31-0.48 kcal/ml); and
 - a lipid fraction;
 - characterised in that at least 70 wt.% of the protein fraction is obtained by demineralising milk, and the protein fraction comprises less than 5 wt.% of free amino acids.

WO 2005/096845 PCT/NL2005/000269

6. A liquid composition according to any one of claims 1-5, wherein the amount of digestible carbohydrates is 18-23.5 and preferably 18-22 g per 100 ml.

- 7. A liquid composition according to any one of claims 1-6, which comprises 0.5-6 g fibre per 100 ml.
- 8. A liquid composition according to any one of claims 1-7, wherein the protein fraction amounts to at least 8.5, preferably above 8.7 g per 100 ml.
- 9. A liquid composition according to any one of claims 1-8, in which the protein fraction contains at least 8.6 wt.% of lysime residues, at least 2.5 wt.% of methionine residues and at least 0.5 wt.% of cysteine residues.
- 10. The composition according to any one of claims 1-9, wherein the protein fraction essentially consists of intact proteins and comprises 60-90 wt.%, preferably 65-78 wt.% of caseins.
- 11. The composition according to any one of clairns 1-10, wherein the lipid fraction amounts to 5.0-7.0 g per 100 ml (0.45-0.63 kca.1/ml).
- 12. The composition according to any one of claims 1-11, having a viscosity of the liquid of below 50 mPa.s at a shear rate of 100 s⁻¹ and a temperature of 20°C.
- 13. A powder that after reconstitution with water provides a composition according to any one of claims 1-12.
- 14. A packaged food product containing between 5 and 250 ml of the composition according to any of claims 1-13 in a unit package.
- 15. A packaged food product containing between 5 and 150 ml of a liquid food product having an energy density of at least 1_45 kcal/ml and comprising at least 7.6 g protein per 100 ml and comprising carbohydrates and fats and optionally vitamins, in a unit package.
- 16. A process for preparing a liquid product according to any one of claims 1-13, comprising preparing a liquid protein fraction and subsequently mixing with a carbohydrate fraction and a fat fraction, characterised by dissolving in an aqueous solution a dry demineralised milk product, optionally together with a part of other water-soluble components, adjusting the suspension obtained to a viscosity value of below 50 mPas (at 100 s⁻¹) and then mixing an amount of this suspension with water or remaining ingredient, including the fat fraction, to arrive at the final composition.